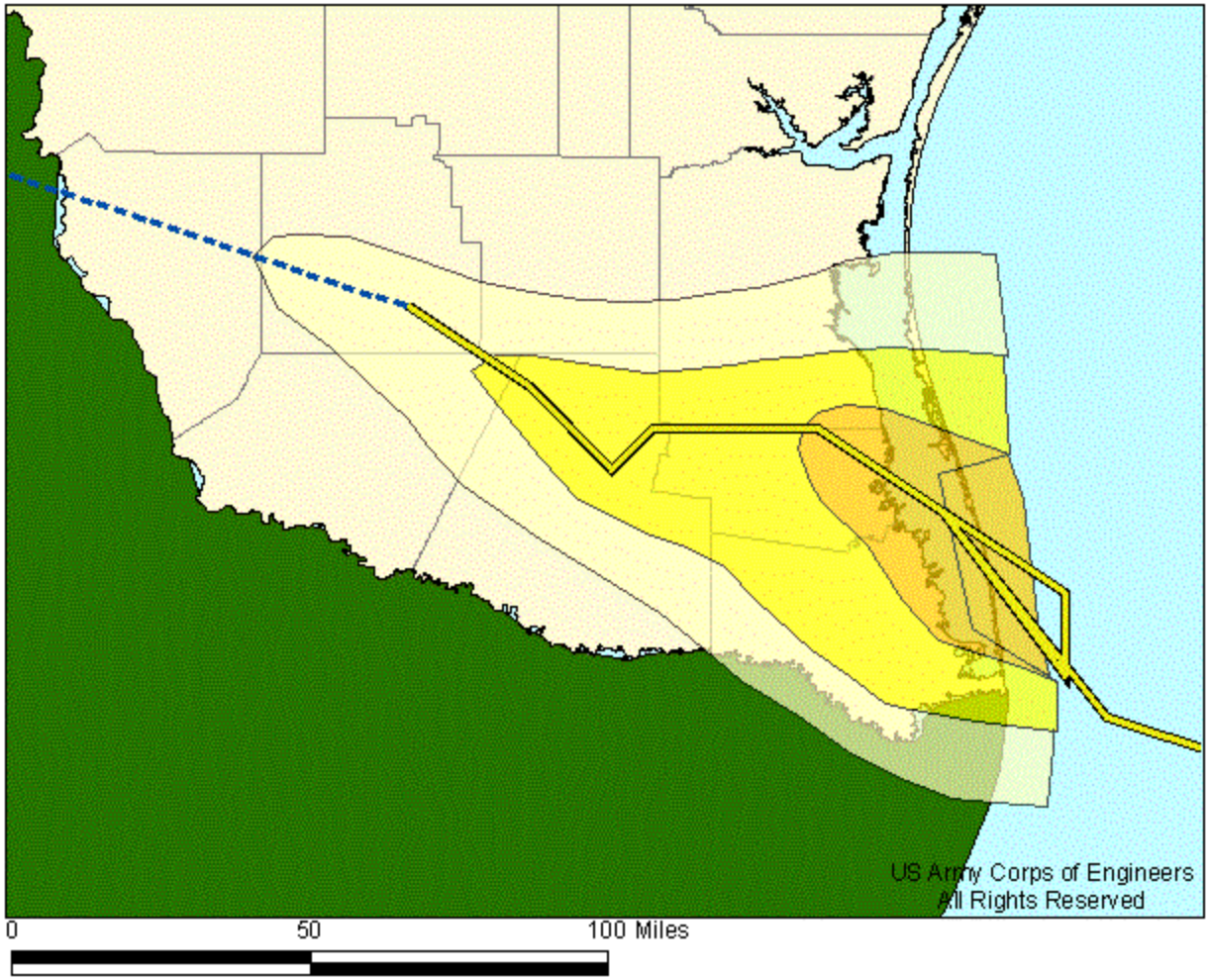
US Army Corps of Engineers

Hurricane dolly Projected Damage Areas

Landfall Plus About 16 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Forecast Track
Historic Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

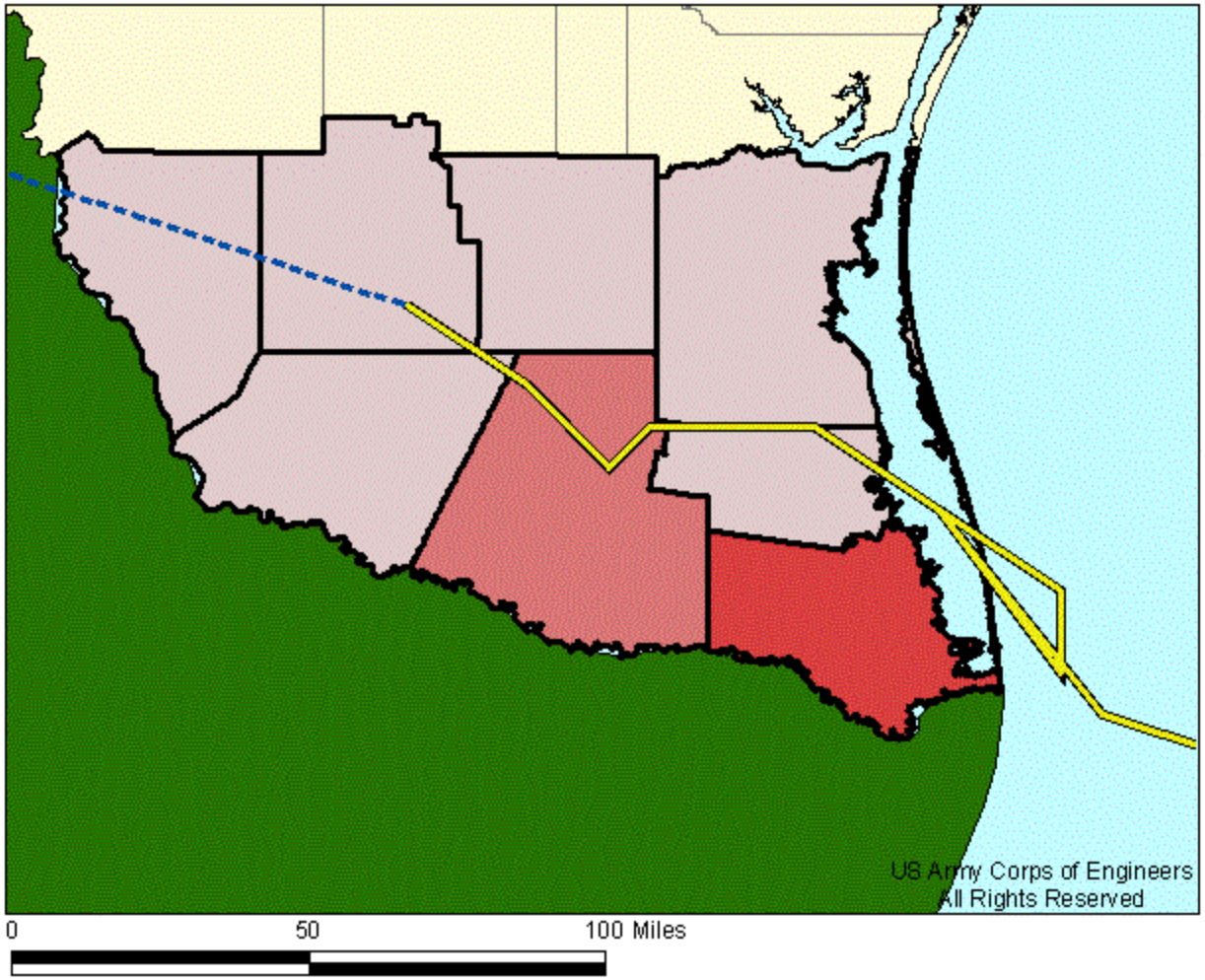
Hurricane dolly Projected Damage Areas	
Generated By: Siemsen, LRL 0630 EDT 07/24/2008	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 18

US Army Corps of Engineers

Hurricane dolly Debris Model

Landfall Plus About 16 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Texas - 1,425,000 Yards

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Forecast Track
Historic Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Debris Model	
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Sources: HURREVAC LRL-DEBRIS	Page 2 of 18

US Army Corps of Engineers

Hurricane dolly Debris Model

Landfall Plus About 16 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Texas		Brooks	3,000
		Cameron	979,000
		Hidalgo	356,000
		Jim Hogg	5,000
		Kenedy	< 1,000
		Starr	4,000
		Willacy	78,000
		Zapata	< 1,000
Texas	1,425,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

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Hurricane dolly Debris Model

Generated By:
Siemsen, LRL 0630 EDT 07/24/2008

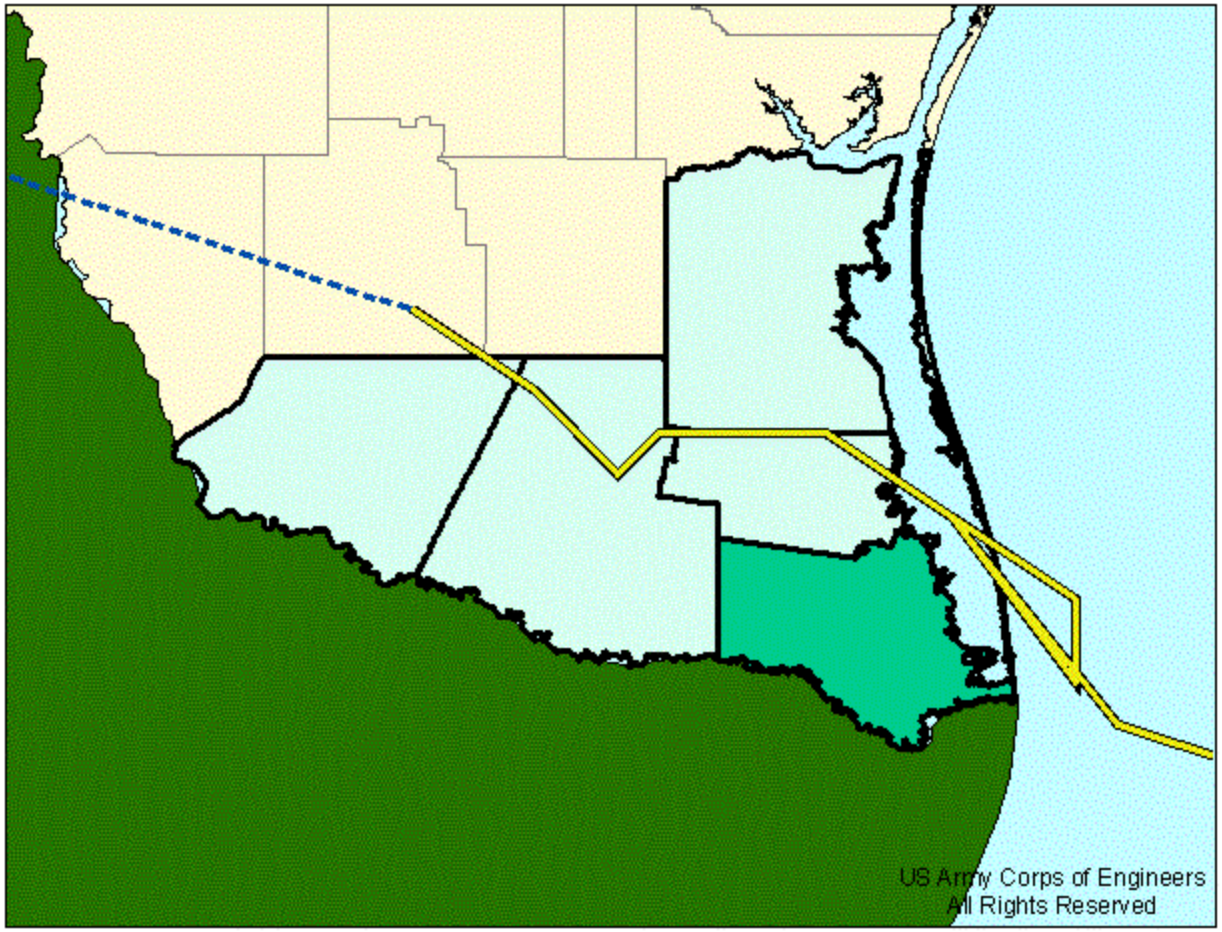
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Commodities Model

Landfall Plus About **16** Hours

For Planning Purposes Only!



0 50 100 Miles

Post Landfall Water Model Results

Day One / Day Two / Day Three
Texas - 18 Truckloads

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Forecast Track
Historic Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC ***(0500 EDT 07/24/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Commodities Model	
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Sources: HURREVAC LRL-DEBRIS	Page 4 of 18

US Army Corps of Engineers

Hurricane dolly Commodities Model

Landfall Plus About 16 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Texas		Cameron	12
		Hidalgo	2
		Kenedy	1
		Starr	1
		Willacy	2
Texas	18		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane dolly Commodities Model

Generated By:
Siemsen, LRL 0630 EDT 07/24/2008

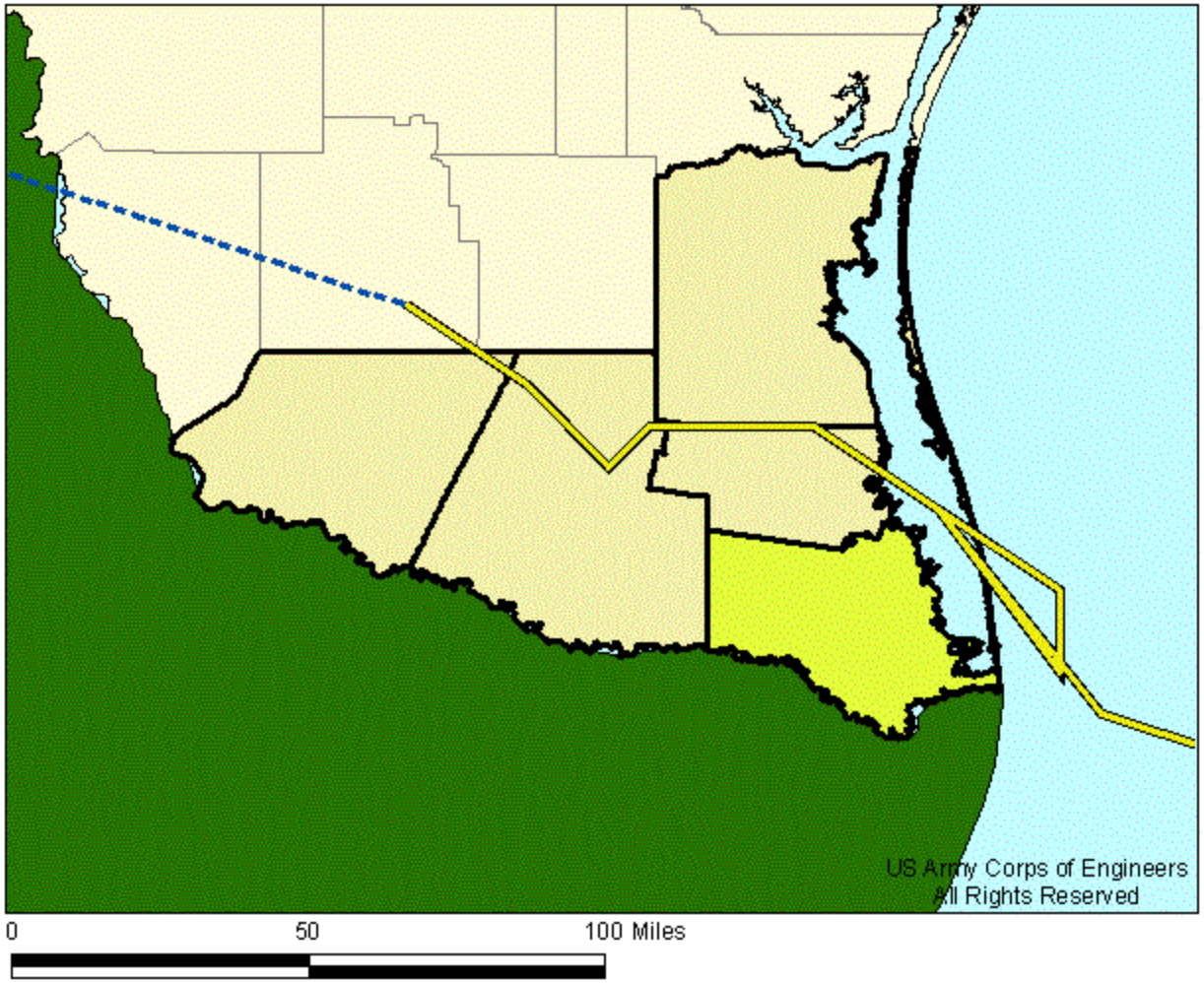
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Temporary Roofing Model

Landfall Plus About 16 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Texas - 3,200

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Forecast Track
Historic Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast. Temporary roofing is based on 4% in CAT 1 and 8% in CAT 2.

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Roofing Model

Generated By:
Siemsen, LRL 0630 EDT 07/24/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Temporary Roofing Model

Landfall Plus About 16 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Texas		Cameron	2,600
		Hidalgo	300
		Kenedy	< 100
		Starr	< 100
		Willacy	300
Texas	3,200		

Temporary roofing is based on 4% in CAT 1 and 8% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane dolly Roofing Model

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Siemsen, LRL 0630 EDT 07/24/2008

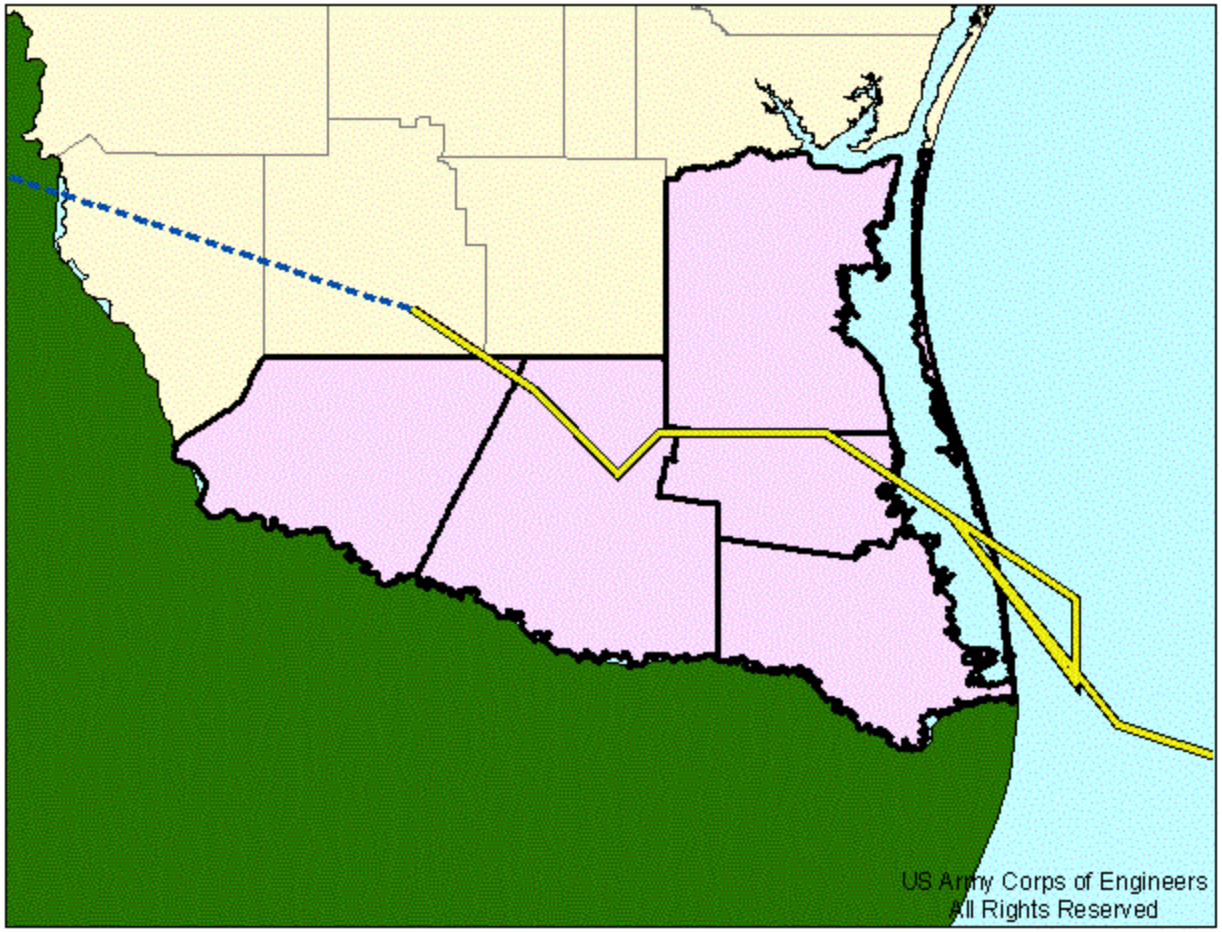
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Temporary Housing Model

Landfall Plus About 16 Hours

For Planning Purposes Only!



0 50 100 Miles

Post Landfall Temporary Housing Model Results

Texas - 700

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Forecast Track
Historic Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast. Temporary housing is based on 1% in CAT 1 and 2% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Housing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 8 of 18

US Army Corps of Engineers

Hurricane dolly Temporary Housing Model

Landfall Plus About 16 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Texas		Cameron	700
		Hidalgo	< 100
		Kenedy	< 100
		Starr	< 100
		Willacy	< 100
Texas	700		

Temporary housing is based on 1% in CAT 1 and 2% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane dolly Housing Model

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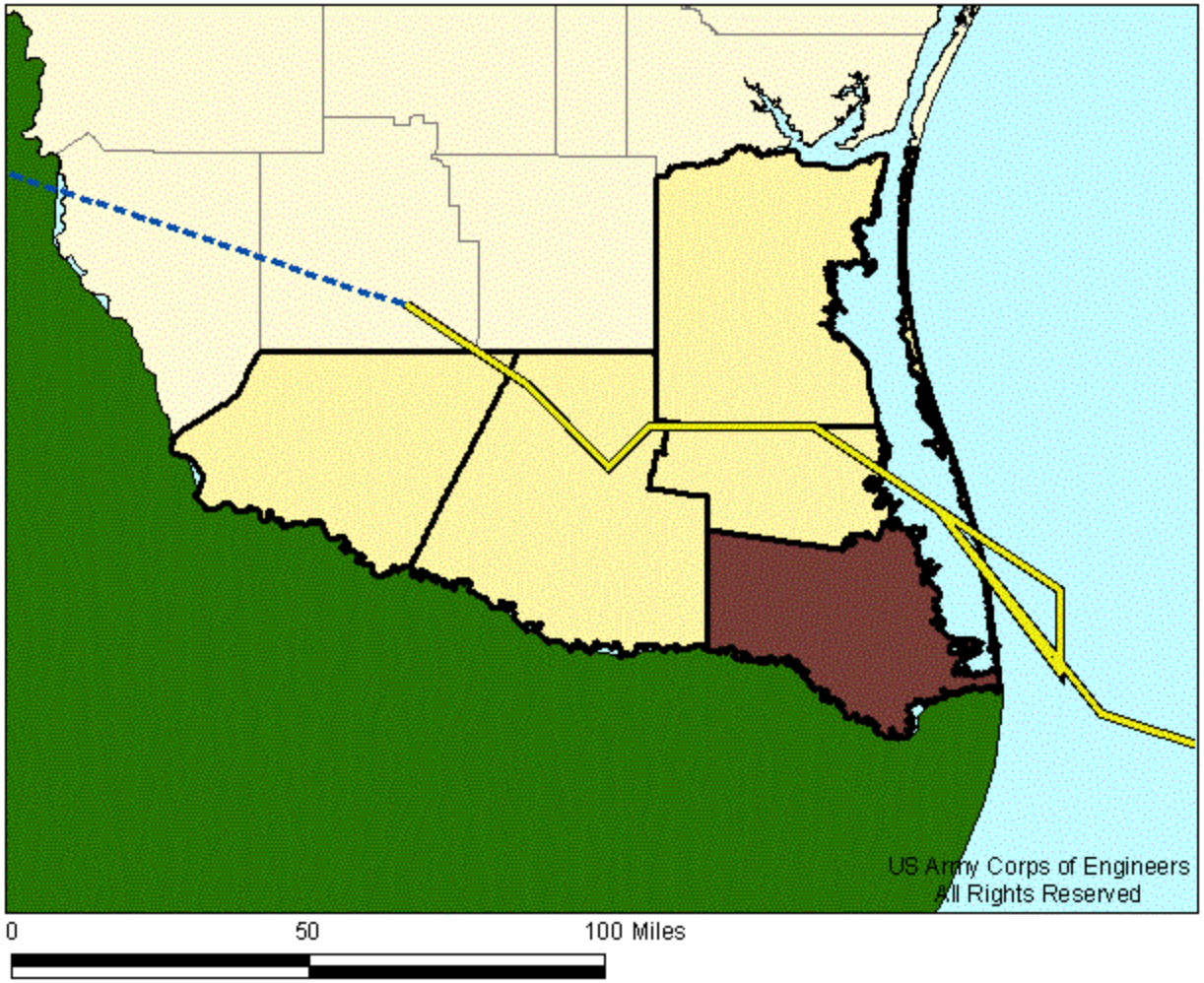
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Population Model

Landfall Plus About 16 Hours

For Planning Purposes Only!



Post Landfall Population Model Results

Texas - 235,000

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Forecast Track
Historic Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Population Model	
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Sources: HURREVAC LRL-DEBRIS	Page 10 of 18

US Army Corps of Engineers

Hurricane dolly Population Model

Landfall Plus About 16 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Texas		Cameron	192,000
		Hidalgo	22,000
		Kenedy	< 1,000
		Starr	< 1,000
		Willacy	21,000
Texas	235,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane dolly Population Model

Generated By:
Siemsen, LRL 0630 EDT 07/24/2008

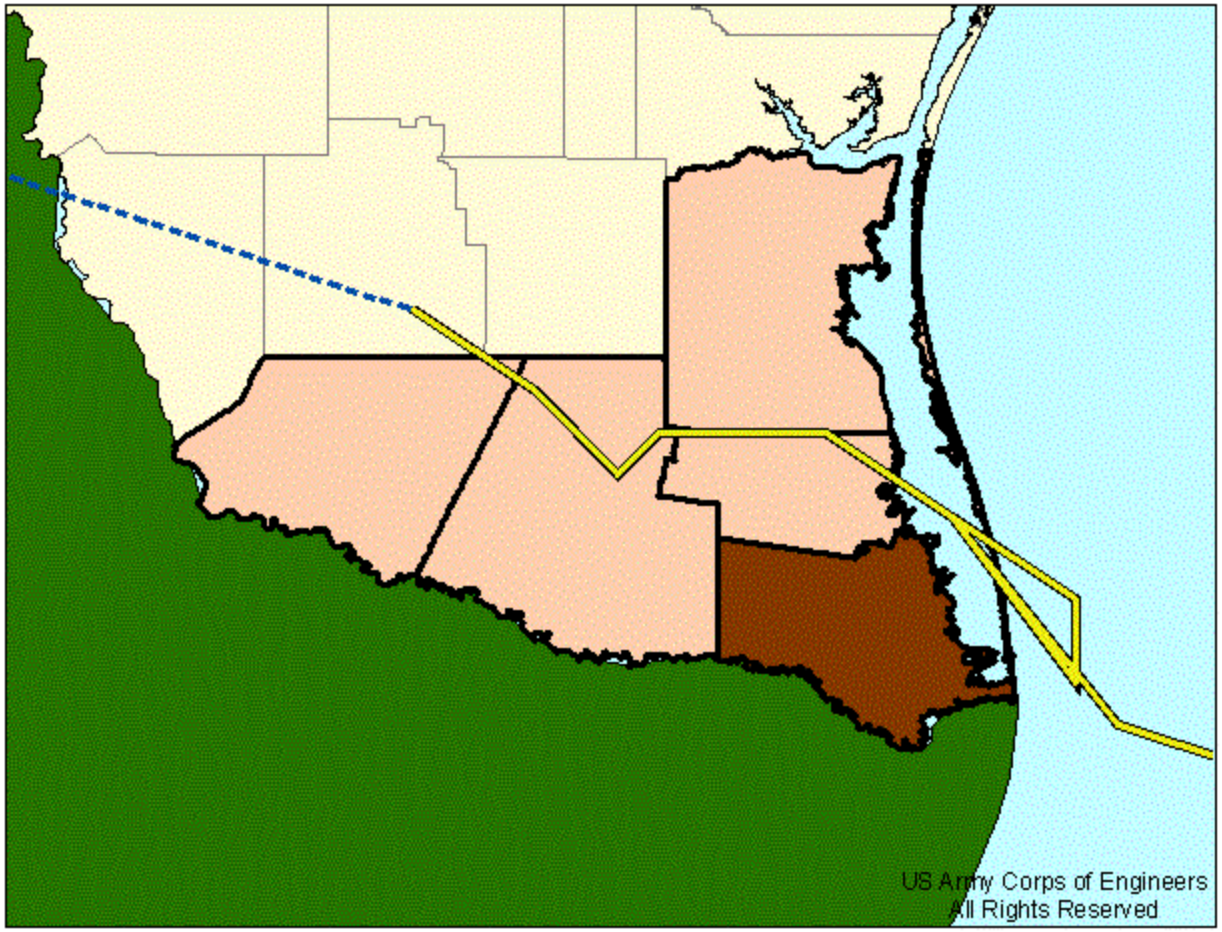
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Households Model

Landfall Plus About 16 Hours

For Planning Purposes Only!



0 50 100 Miles

Post Landfall Households Model Results

Texas - 70,000

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Forecast Track
Historic Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Households Model	
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Sources: HURREVAC LRL-DEBRIS	Page 12 of 18

US Army Corps of Engineers

Hurricane dolly Households Model

Landfall Plus About 16 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Texas		Cameron	58,000
		Hidalgo	6,000
		Kenedy	< 1,000
		Starr	< 1,000
		Willacy	6,000
Texas	70,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

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or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane dolly Households Model

Generated By:
Siemsen, LRL 0630 EDT 07/24/2008

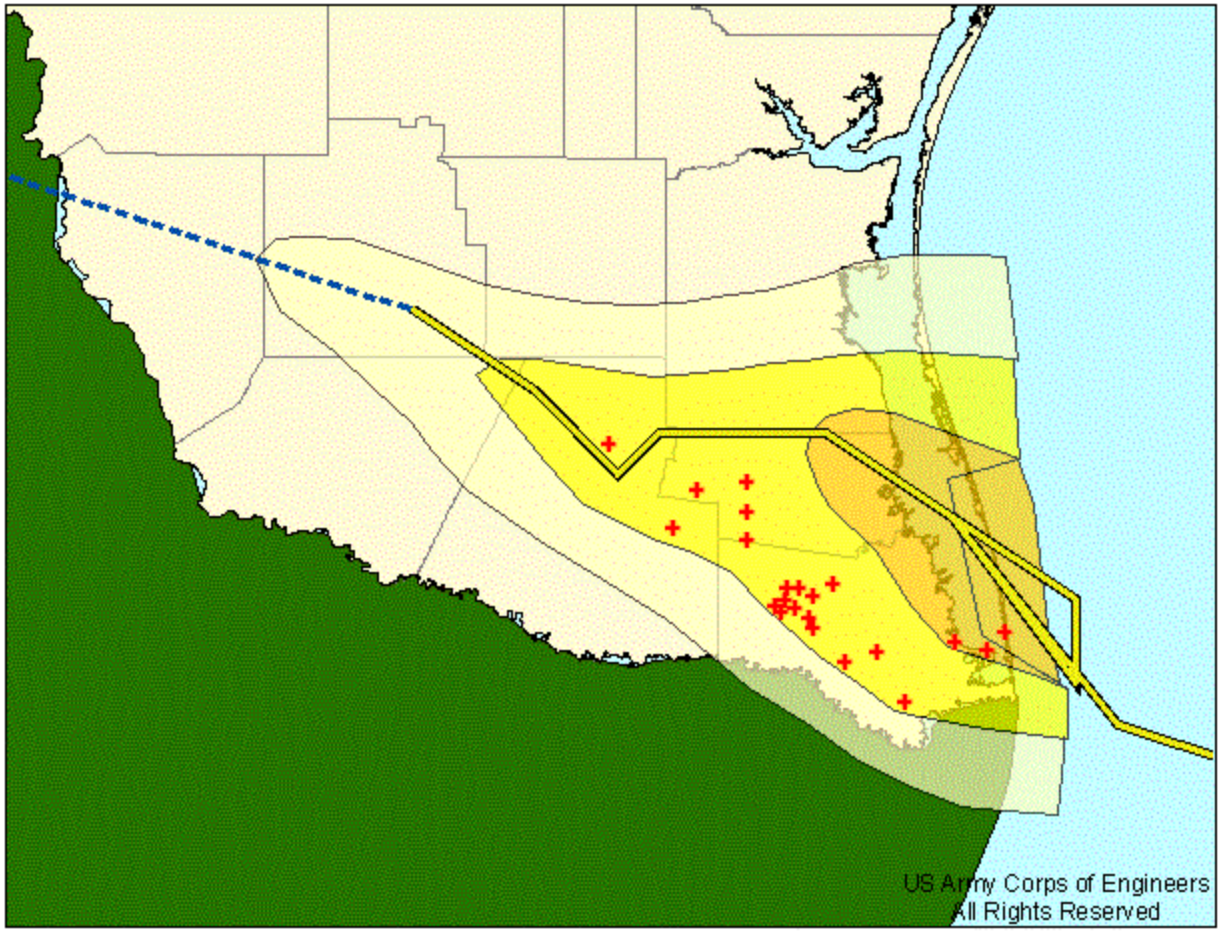
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Fire Stations

Landfall Plus About **16** Hours

For Planning Purposes Only!



0 50 100 Miles

Most Probable Landfall Fire Stations Inside Hurricane Force Winds

Texas - 22

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

+ Fire Stations
Forecast Track
Historic Track

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Fire Stations	
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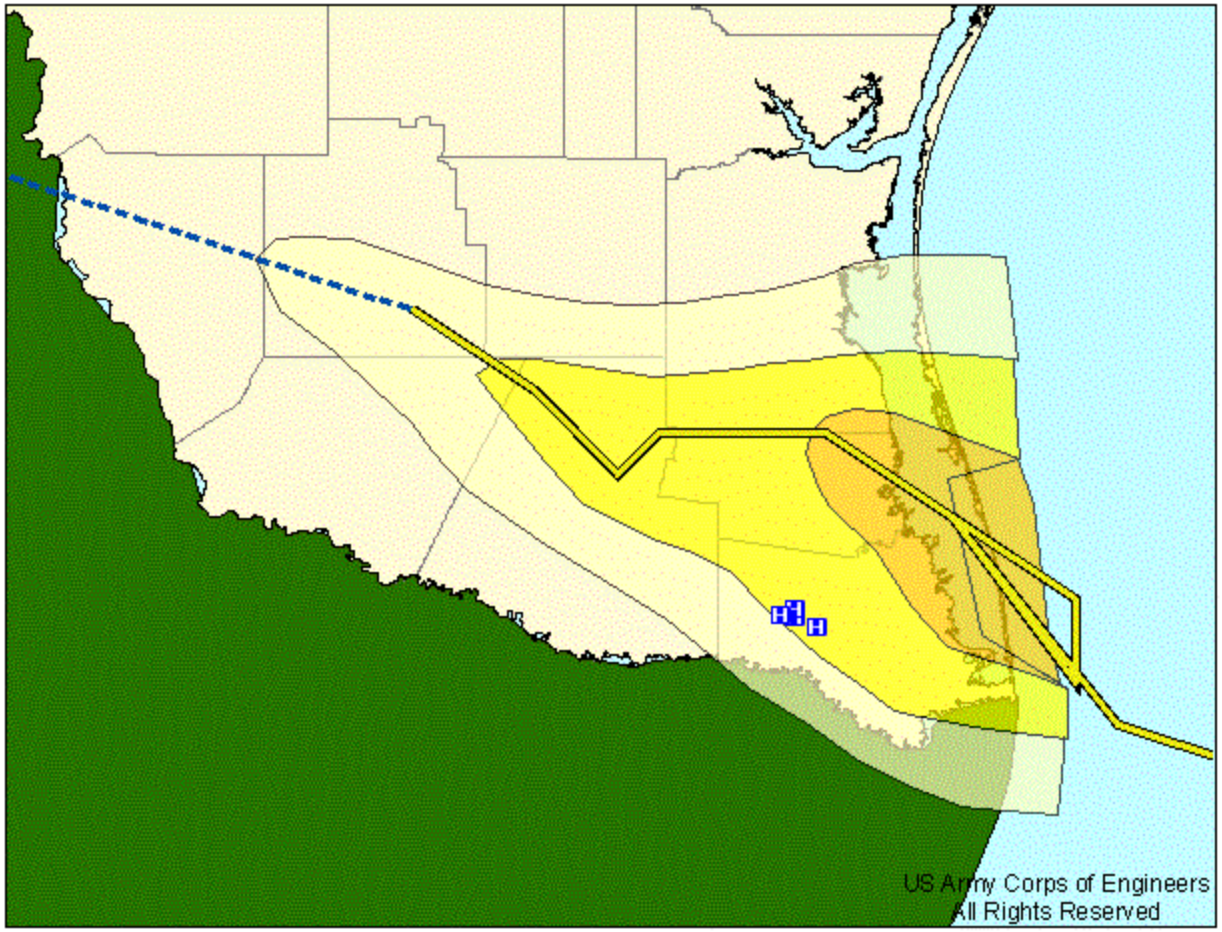
Sources: HURREVAC LRL-DEBRIS	Page 14 of 18

US Army Corps of Engineers

Hurricane dolly Hospitals

Landfall Plus About **16** Hours

For Planning Purposes Only!



0 50 100 Miles

Most Probable Landfall Hospitals Inside Hurricane Force Winds

Texas - 4

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Hospitals
Forecast Track
Historic Track

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast.

The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

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Hurricane dolly Hospitals	
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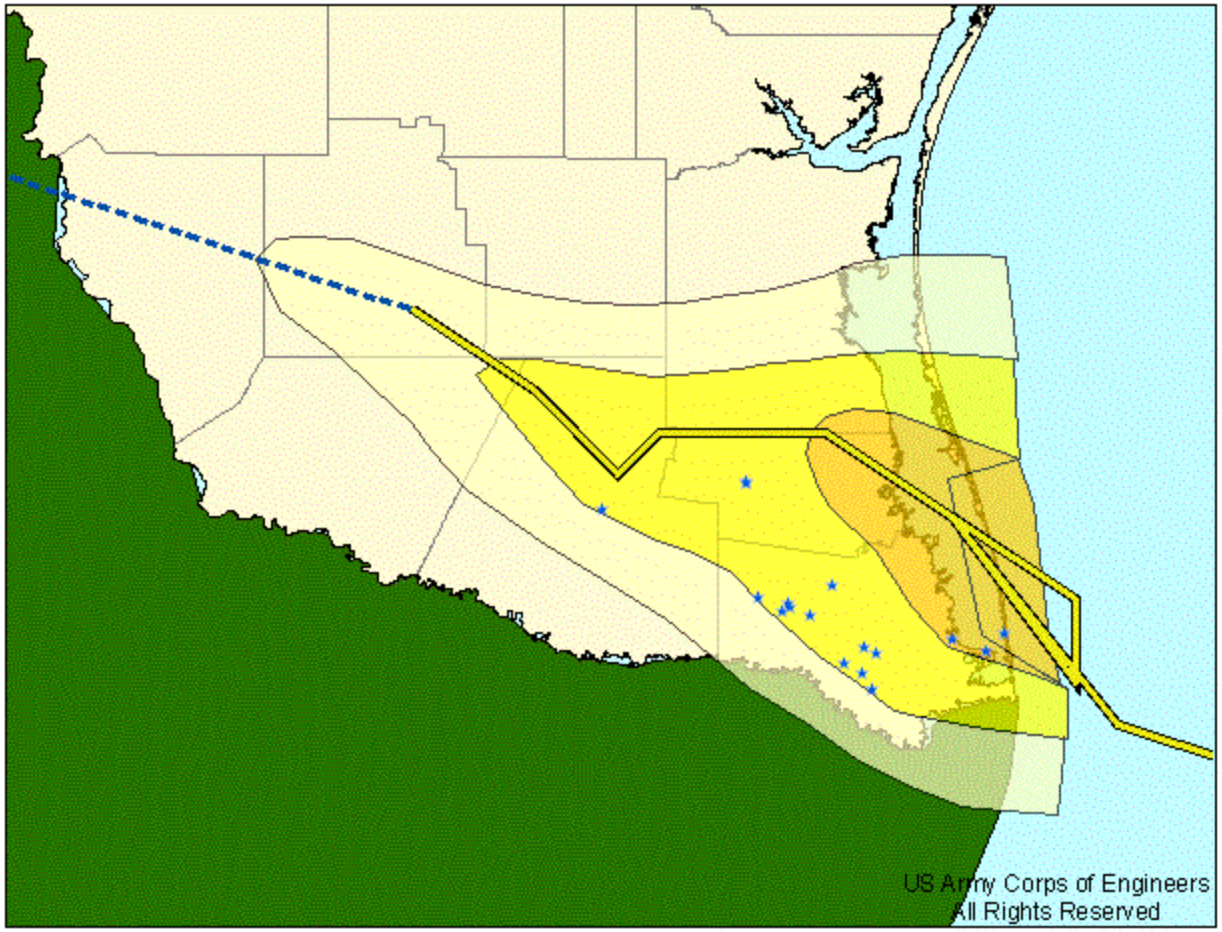
Sources: HURREVAC LRL-DEBRIS	Page 15 of 18

US Army Corps of Engineers

Hurricane dolly Law Enforcement

Landfall Plus About 16 Hours

For Planning Purposes Only!



0 50 100 Miles

Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

Texas - 17

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Law Enforcement
Forecast Track
Historic Track

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast.

The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

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Hurricane dolly Law Enforcement	
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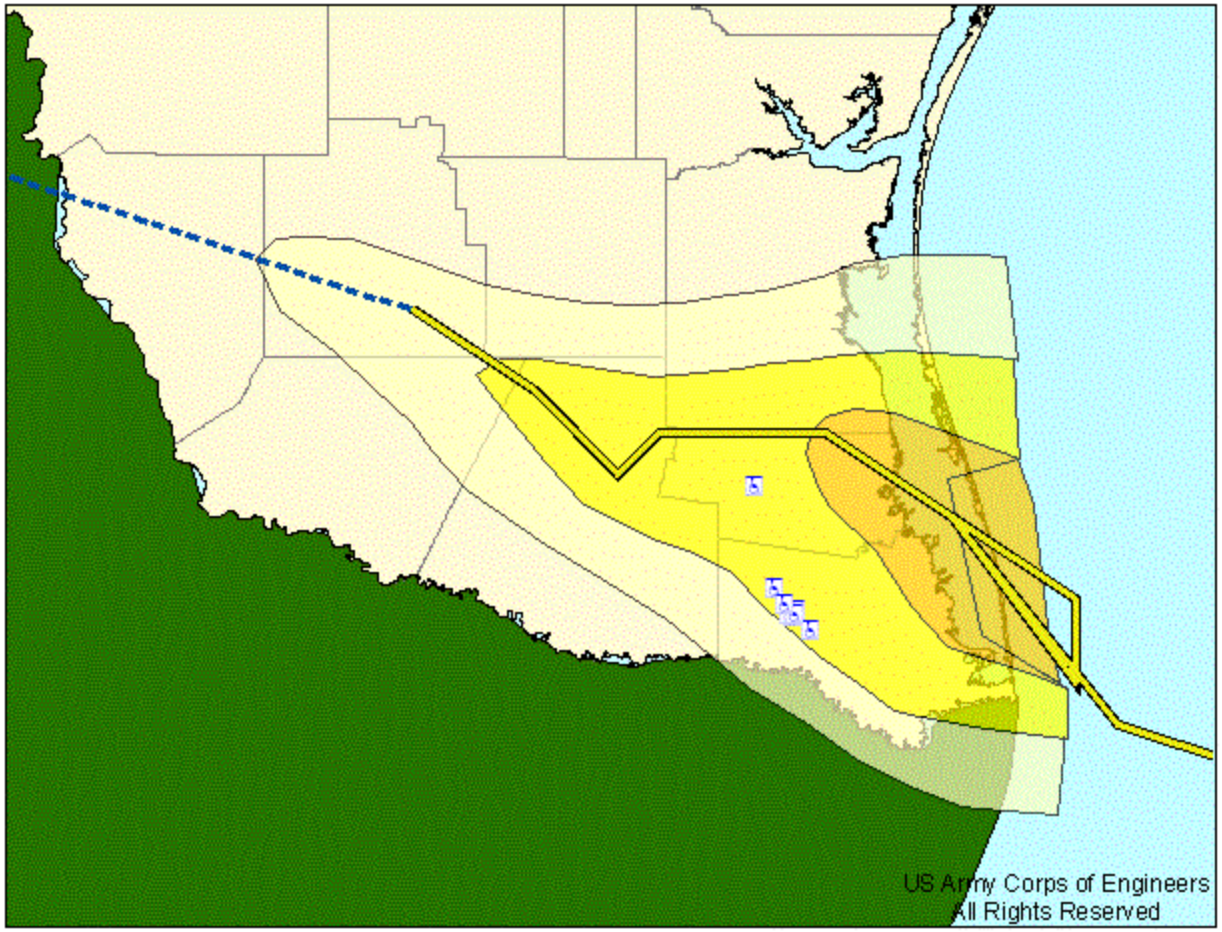
US Army Corps of Engineers

Hurricane dolly Nursing Homes

Landfall Plus About 16 Hours

For Planning Purposes Only!



0 50 100 Miles

Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

Texas - 12

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Nursing Homes
Forecast Track
Historic Track

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast.

The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Nursing Homes	
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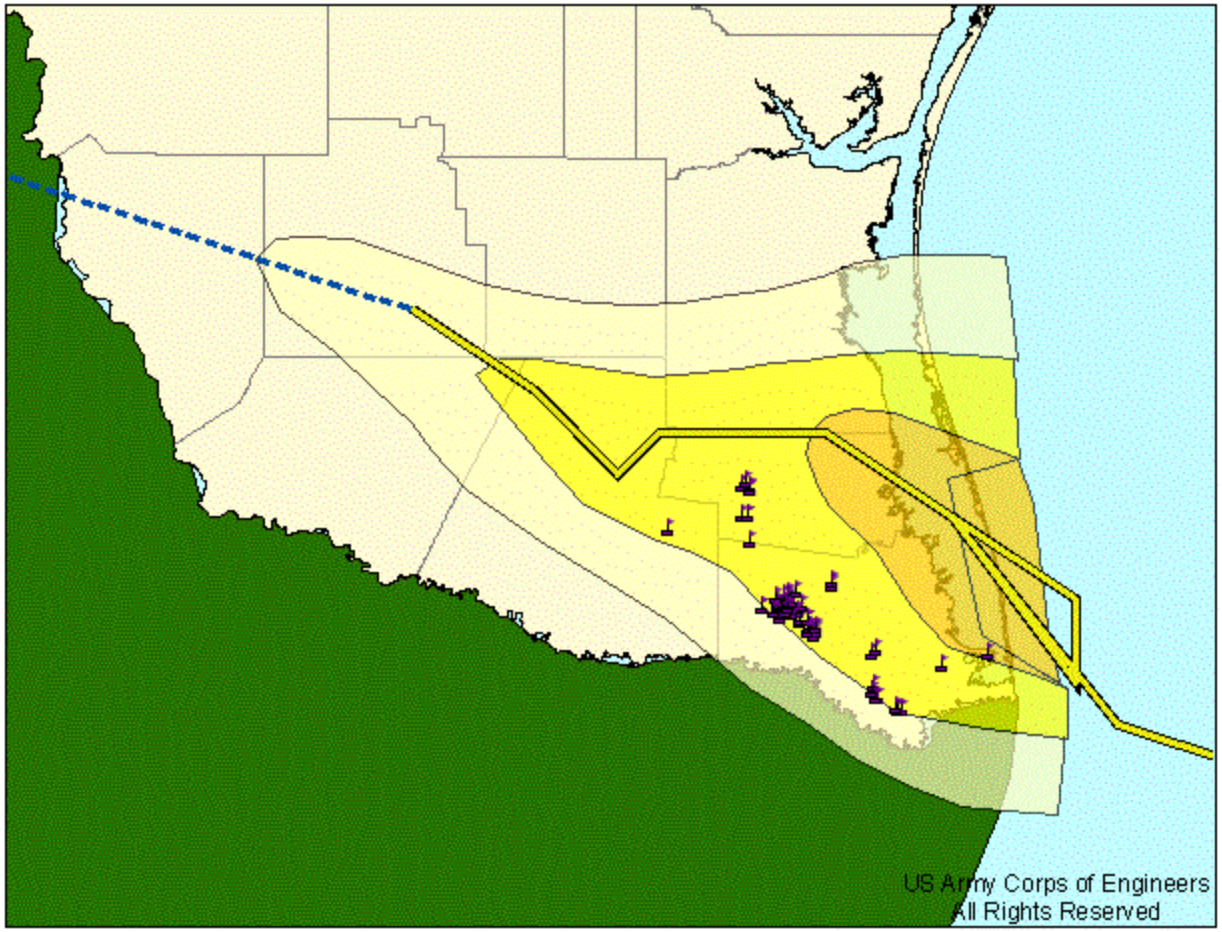
Sources: HURREVAC LRL-DEBRIS	Page 17 of 18

US Army Corps of Engineers

Hurricane dolly Schools

Landfall Plus About **16** Hours

For Planning Purposes Only!



0 50 100 Miles

Most Probable Landfall Schools Inside Hurricane Force Winds

Texas - 69

Model results per County on following page

This model is based on a Category 2 storm making landfall near Brownsville, TX.

Schools
Forecast Track
Historic Track

Information provided on this page displays a Category 2 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0500 EDT 07/24/2008) forecast.

The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Schools	
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Sources: HURREVAC LRL-DEBRIS	Page 18 of 18